

48V E-Heater Controller

The Eaton aftertreatment e-heater controller is an air-cooled, power-electronic converter designed to regulate 48-volts to a catalyst heater element for commercial vehicle emission control applications. Designed for high efficiency and accurate power output up to 10kW, the e-heater controller contains all the necessary power electronics to ensure the electrical system remains stable during operation.

Features & Benefits

- Controls a total of 200 amps of load current to a resistive heater element
- Regulates and supplies power to the heating coil while ensuring high power quality for the 48-volt vehicle system
- Provides power to a heating coil in the vehicle's aftertreatment system which actively heats catalyst components, such as the SCR
- Helps reach efficient operating temperatures as quickly as possible upon engine start and maintain these temperatures during low load operation
- Significant NOx reduction of up to 75 percent

Key Differentiators

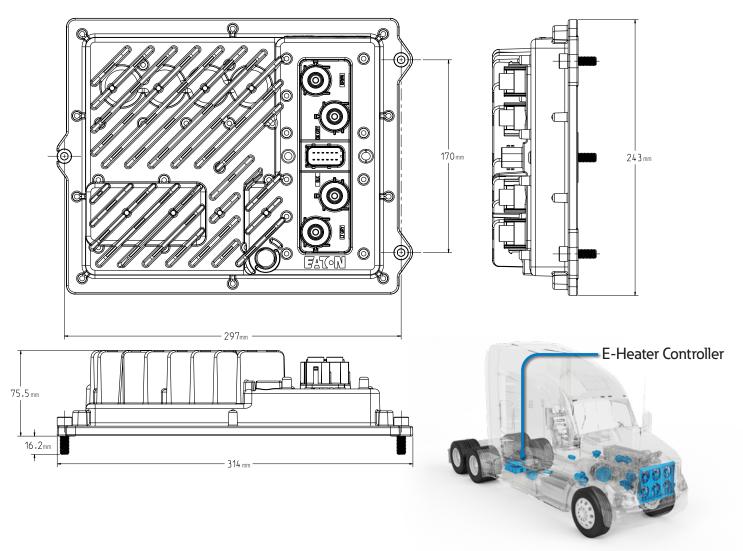
- Manages power to aftertreatment heater
- >99% peak efficiency
- · Soft-start and soft-stop control
- · Precise power regulation
- Optional power protection/limitation software feature
- Air cooled power electronic converter for easy integration
- Eaton integrated components include power connectors (HPLB RD8) and signal connectors (TE HDSCS 12-pin)





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Parameter	Min.	Тур.	Max.	Unit
Maximum power			10	kW
Input voltage range	12		60	V
Maximum output current			200	А
E-Heater controller weight	3.0			kg
Ingress protection rating		IP69K		
Ambient operation temperature	-40°		85°	C
Communication		CAN 2.0 or CAN FD		



As a leader in power conversion and protection, Eaton can assist commercial vehicle manufacturers in transitioning to 48-volt systems with various solutions to produce and manage that power safely and efficiently.



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